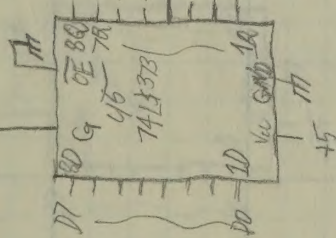
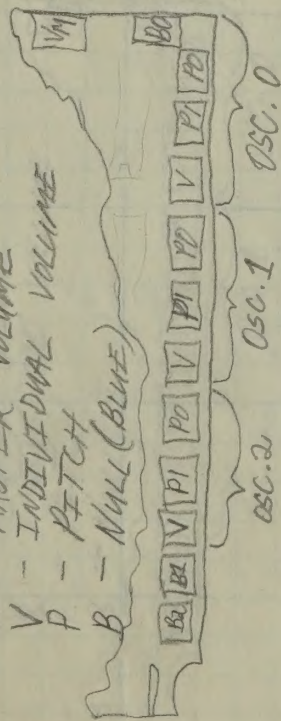


OSC  $\emptyset \Rightarrow$  HIGH ID, LOW ID, 2M, UHF, LOCAL  
OSC R  $\Rightarrow$  REV<sub>PORT 1</sub>, GM<sub>PORT 2</sub>, REVERSE PATCH RINGER  
OSC ~~B~~ 1  $\Rightarrow$  PORT 3, "R", PATCH TUNE OUT



CONTROL DETAIL.

VM - MASTER VOLUME  
V - INDIVIDUAL VOLUME  
P - PITCH  
B - NULL (BUNT)

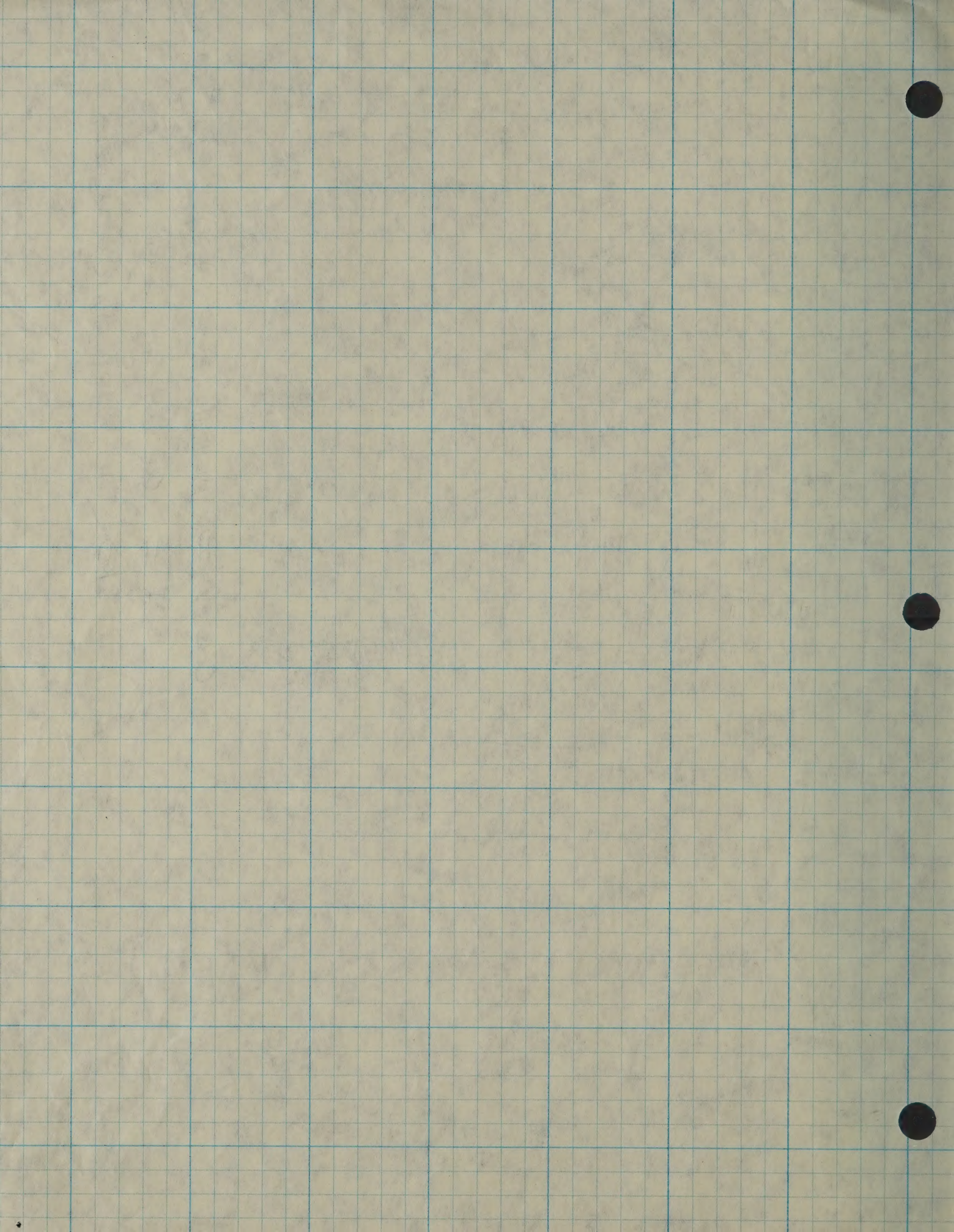


TELEMETRY BYTE:

BIT:	7	6	5	4	3	2	1	0
OSC:	X	X	2	1	0	2	1	0
FTN:	X	X	PITCH	ENABLE(1)				





















4 JAN, '84

HP 1676

WALDMAN

FRONT  
PANEL

PATCH

TT

I/O

AUDIO

CPU

← APPROX.  
CARD  
LOCATIONS

PATCH PTT COR ADUT AIN

PATCH

1

1

1

1

HALT

RUN

2

2

2

2

RESET

RESET

COR  
6

3

3

3

3

WAIT

PTT  
6

4

4

4

4

BUSAK

BUSAK

7

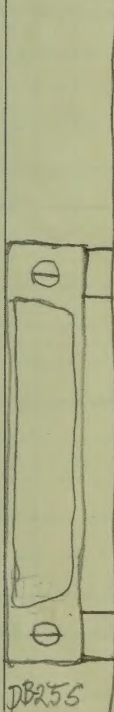
5

5

5

5

LED'S



TBA

DB-25S

DB-25S

DE-9S

PATCH

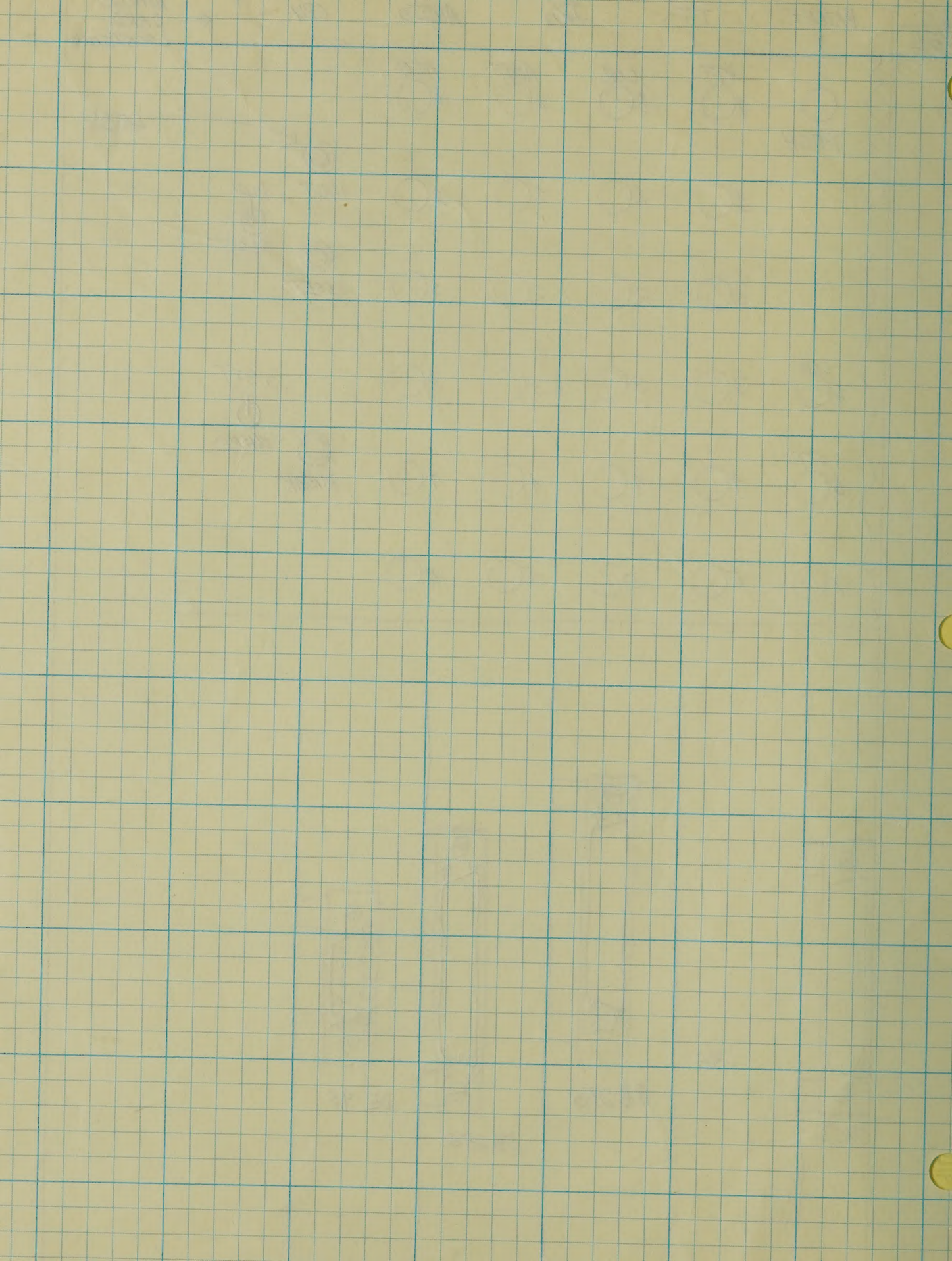
TT

I/O

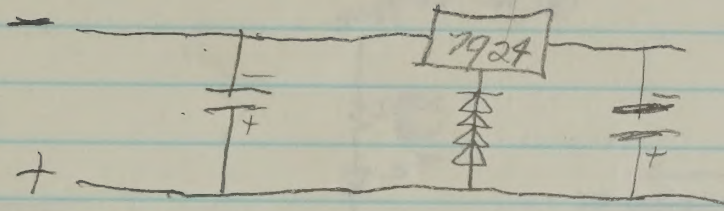
AUDIO

CPU









Needed for cabinet:

fuse holder / fused  
phone jack  
25' telephone cord  
(page card)



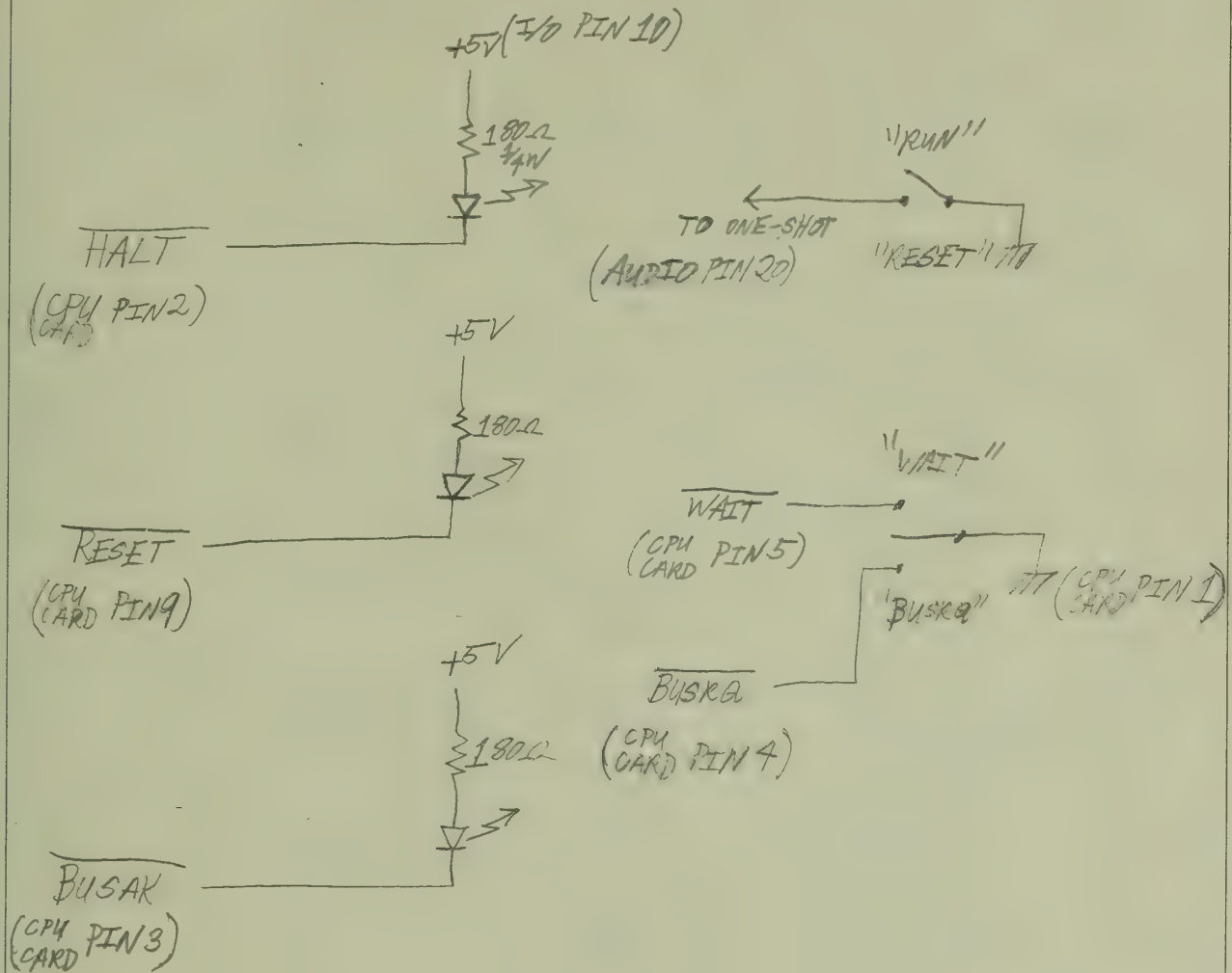




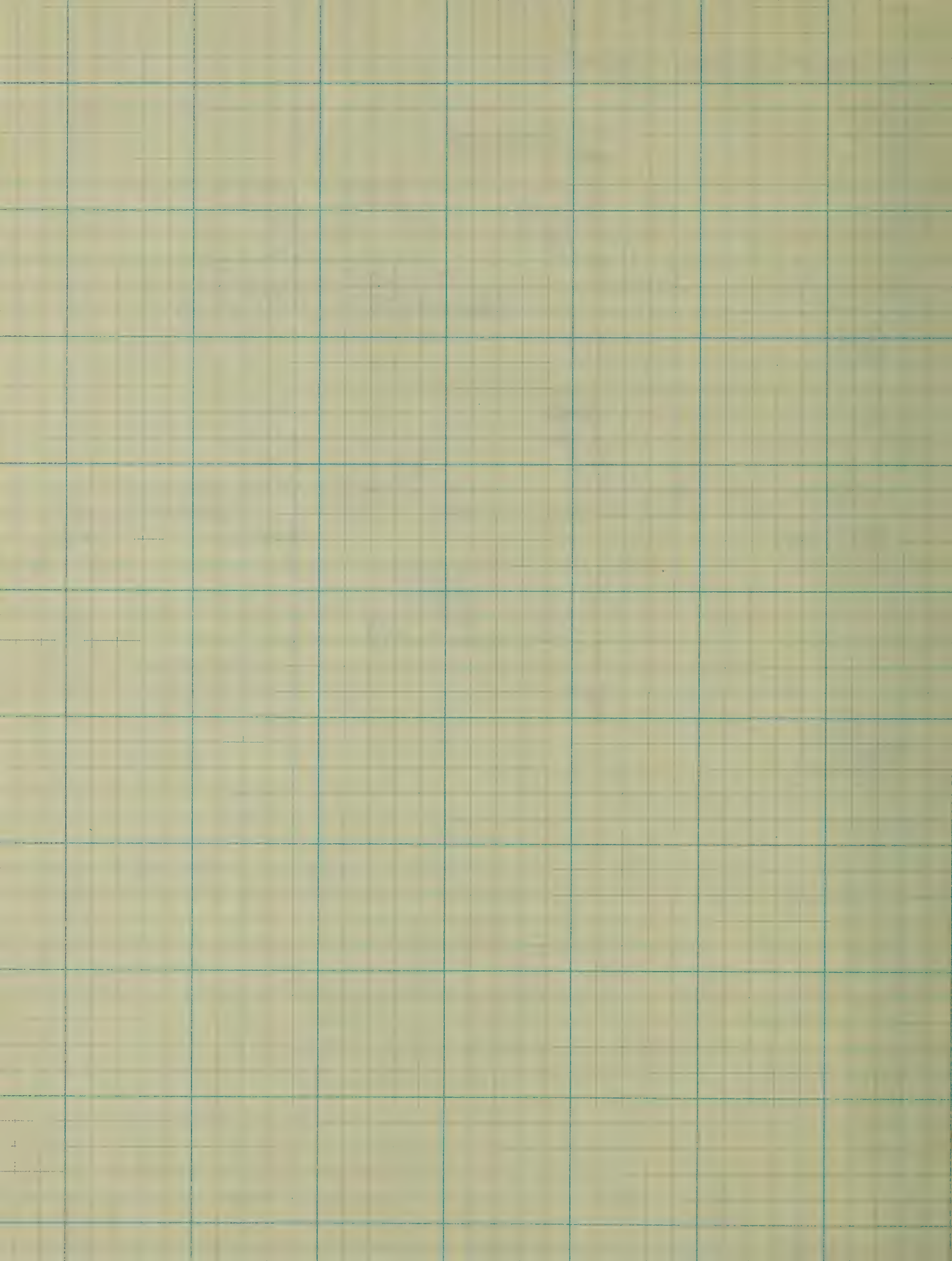
7 JAN, '84

HP1676

W462W4

FRONT PANEL DISPLAY







Projected 9-20-83

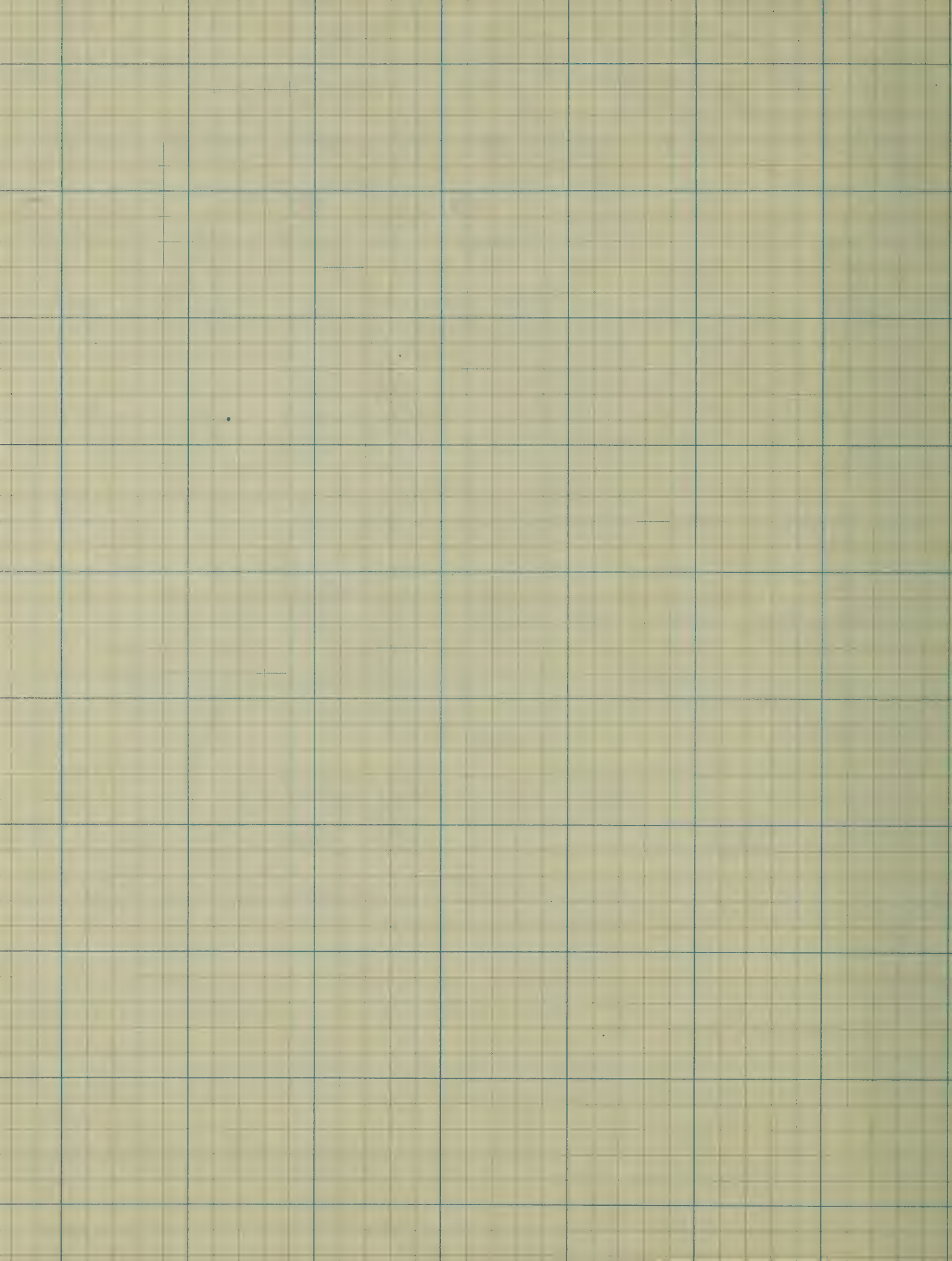
A<sub>0</sub> - 2m TX  
A<sub>1</sub> - 220 link TX  
A<sub>2</sub> - 6m TX  
A<sub>3</sub>  
A<sub>4</sub>  
A<sub>5</sub>  
A<sub>6</sub> - Patch  
A<sub>7</sub> - Tension

PTT0 - 2m TX  
PTT1 - 220 link TX  
PTT2 - 6m TX  
PTT3 - 5<sup>25</sup>/49 6m  
PTT4  
PTT5  
PTT6 -  
PTT7 - Baffle-up

A<sub>±0</sub> - 2m RX  
A<sub>±1</sub> - 220 RX  
A<sub>±2</sub> - 6m RX  
A<sub>±3</sub> - 450 control  
A<sub>±4</sub> -  
A<sub>±5</sub>  
A<sub>±6</sub> - Patch  
A<sub>±7</sub> - Telemetry + Tension

COR0 - 2m RX  
COR1 - 220 link RX  
COR2 - 6m RX  
COR3 - 450 control  
COR4 -  
COR5 - (Ring Detect)  
COR6 - Batt. power  
COR7 - Interrupt OMC. ( $\approx 18\text{Hz}$ )





## I/O Board

ADDR  
00

8 active low inputs (interact generator)  
 8 active low HV inputs

01

8 Bits input (4 or 5 for TT decoder, interact  
 generator)

8 low threshold inputs



Dist	:	360, 740	01
Ring	:	450, 620	10
Ring	:	450, 740	11

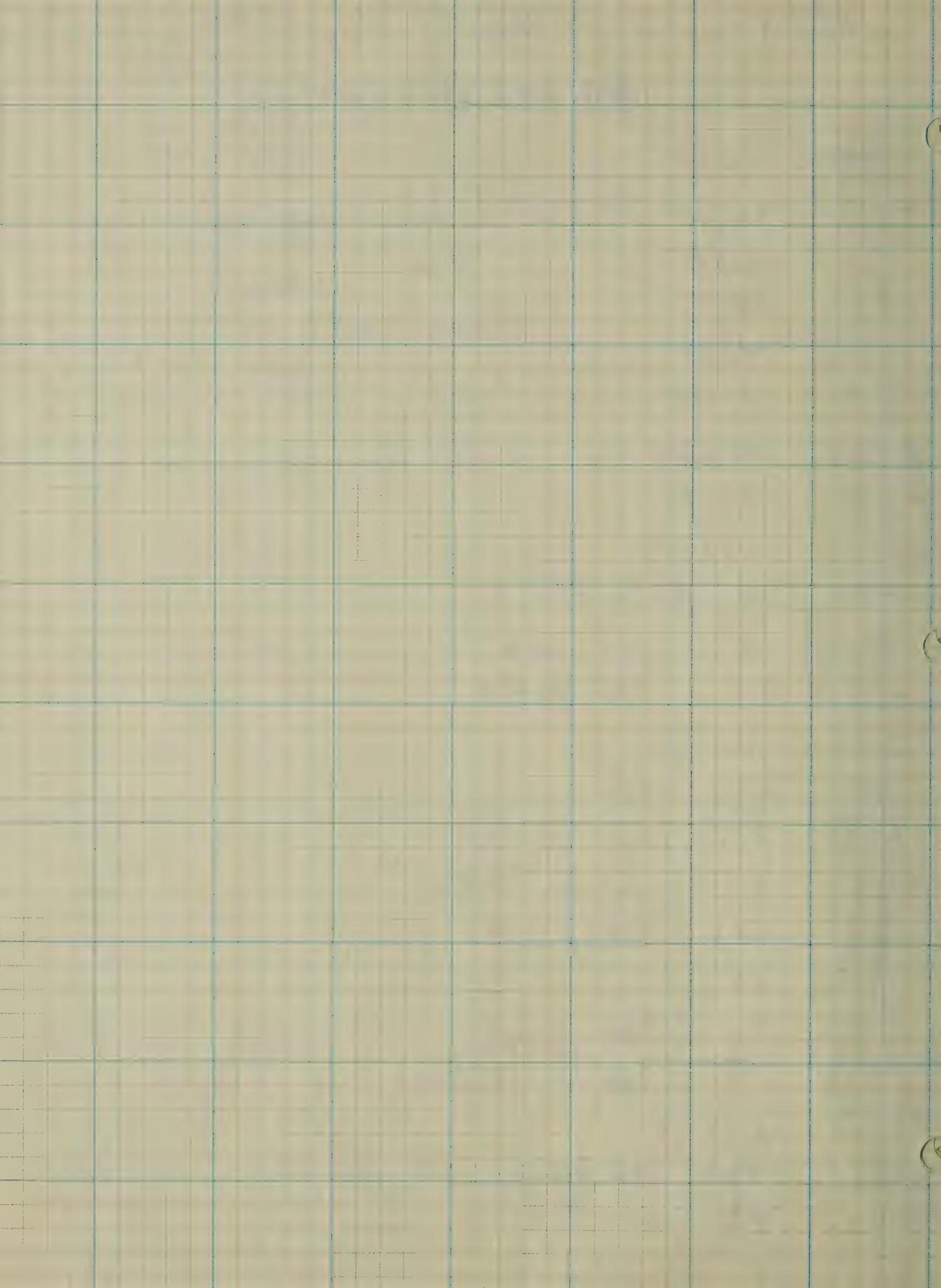
END

FUNCTION COMPLETE  
TX OK

I/O Part Requirements

Qty.	Description
✓ 2	74L04
✓ 2	74L05
✓ 1	7407
✓ 2	74L00
✓ 1	74L02
✓ 1	74L260
✓ 1	74L244
✓ 3	74L373
✓ 13	1K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 5	330 $\Omega$ $\frac{1}{4}W$ 10%
✓ 8	680 $\Omega$ $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 1	40 $\Omega$ 1W
✓ 3	120 $\Omega$ $\frac{1}{4}W$
✓ 4	3.6K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 1	2K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 6	5.1K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 4	10K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 6	12K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 1	12K $\frac{1}{4}W$ or $\frac{1}{8}W$
✓ 3	0.02 nF
✓ 3	10 nF 16V Tant
✓ 4	10 4.7 nF 10V Tant

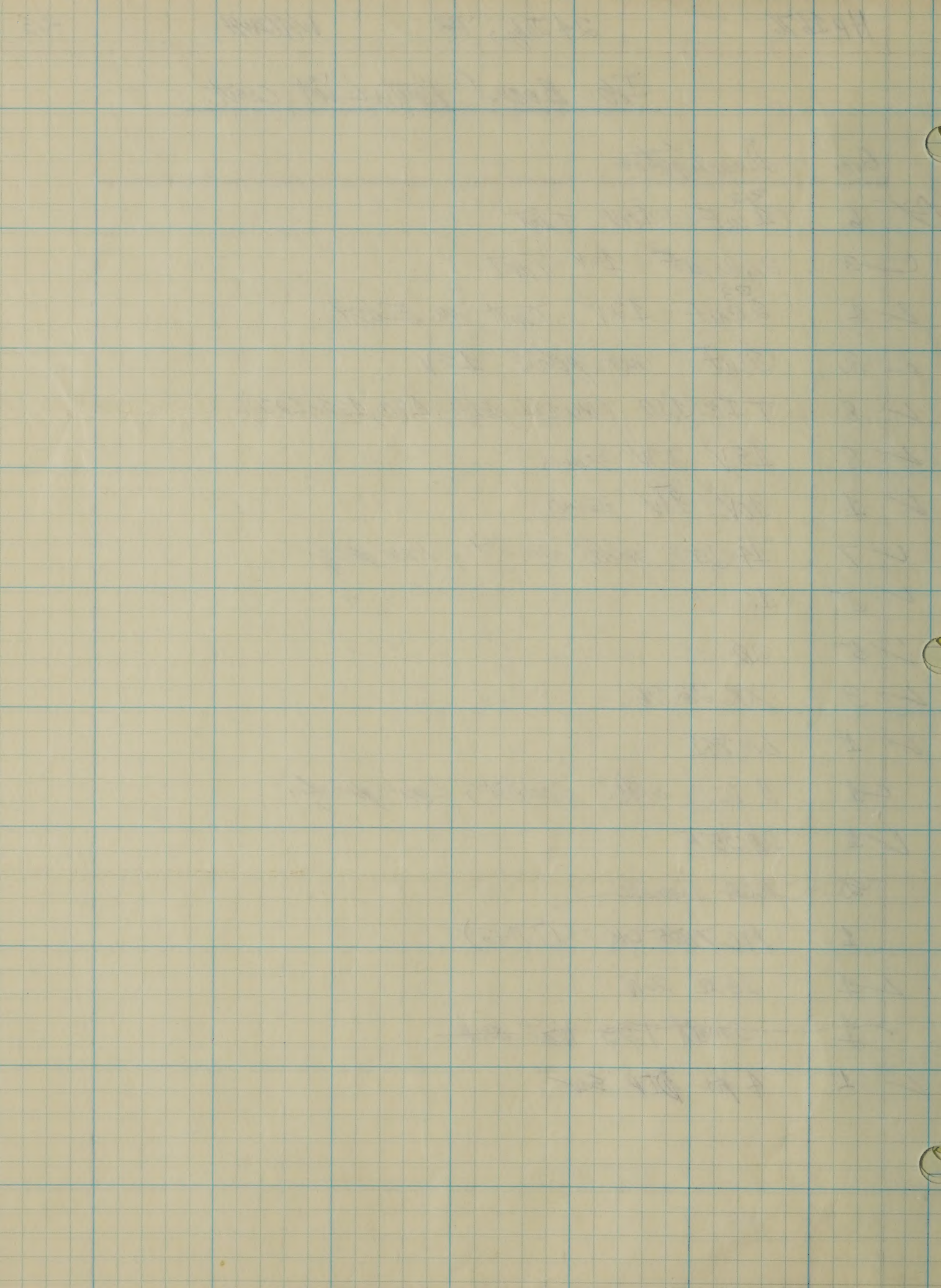




I/O Board Parts List, cont.

Quan	Description
✓ 6	<sup>2,2</sup> 1 $\mu$ F 10V Tant
✓ 3	2.2 $\mu$ F 12V Tant
✓ 1	<sup>53</sup> 20 $\mu$ F 12V Tant on Elect
✓ 2	3 $\mu$ F non polar 12V
✓ 8	TIP 110 (or 111, 112, 120, 121, 122)
✓ 8	18V 5W Zener
✓ 1	10V 1W Zener
✓ 7	14 DIP solder socket, Low prof.
✓ 5	16 " " " " " "
✓ 5	20 " " " " " "
✓ 3	XR 2206
✓ 1	LM 741
✓ 1	8 DIP solder socket, Low prof.
✓ 1	DB 25 F
2	<del>RCA Female</del>
1	MC 7805 CK (TO-3)
✓ 4	15 $\Omega$ 2W
1	<del>Small TO-3 Heat sink</del>
✓ 1	4 pos DIP SW

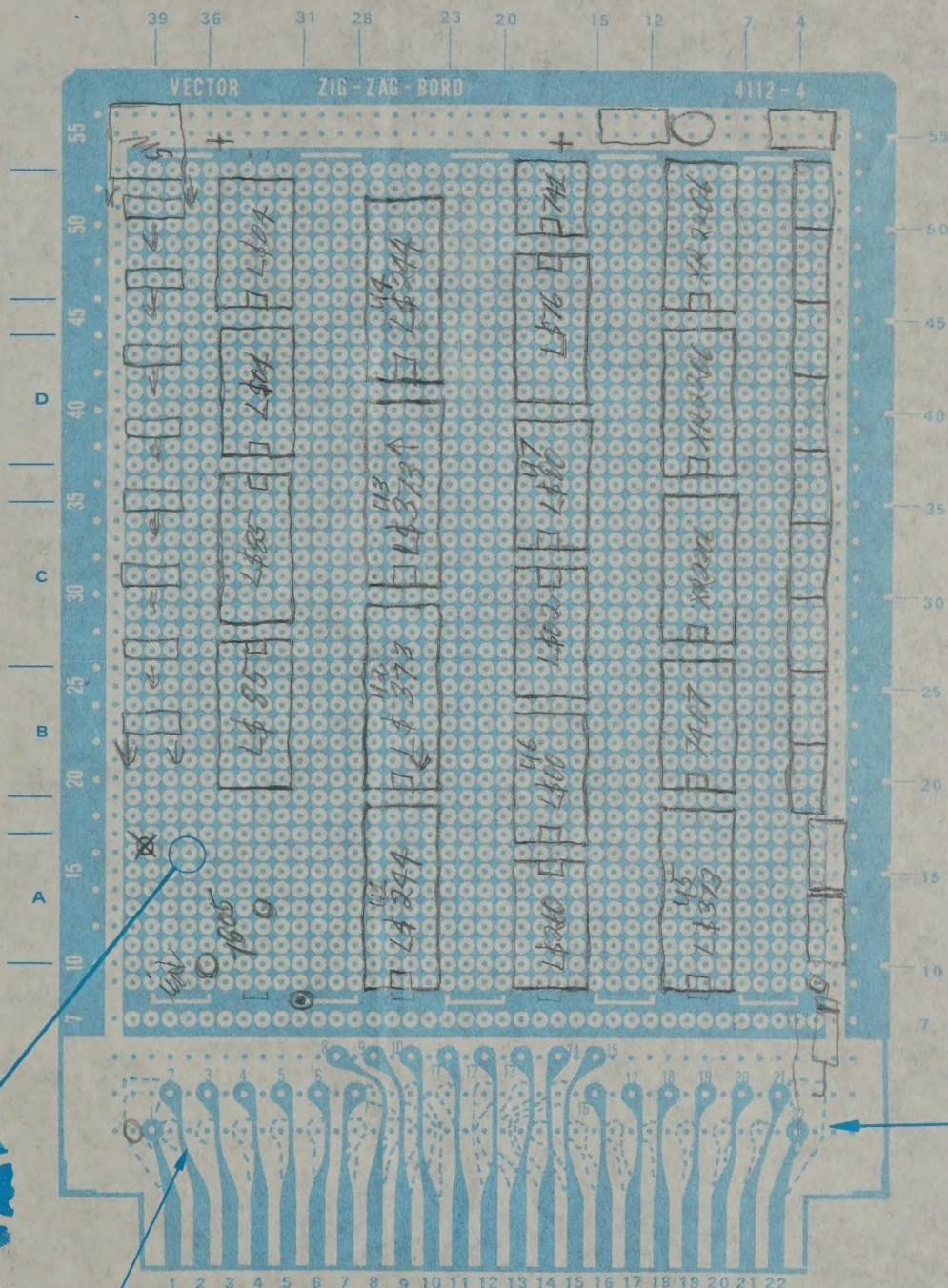






# HP1676 I/O CARD LAYOUT PAPER FOR 4112-4 SERIES ZIG-ZAG PLUGBOARD COMPONENT SIDE

NOTICE: Where tin coated circuitry exists a small percentage of the holes may have solder blockage. This is usually a light "skin" easily penetrated by component leads. In some cases, a soldering iron may be required.



CAUTION: In any plug contact area on either side of Plugboard, use only those holes having pads. Holes without pads may have insufficient clearance to adjacent circuitry and using them could cause shorting.

2. IN ACCORDANCE WITH VECTOR'S CONSUMER PROTECTION POLICIES, WE SUGGEST YOU INSPECT THE BOARD BEFORE ASSEMBLY TO VERIFY ADEQUATE CLEARANCE WILL EXIST BETWEEN THE GROUND PLANE SURROUNDING THE HOLES AND ANY LEADS OR TERMINALS INSTALLED IN HOLES SO THAT SHORTING WILL NOT OCCUR, THIS BOARD IS INTENDED FOR USE IN NON-HOSTILE ENVIRONMENTS UP TO 200 VOLTS RMS OR 300 VOLTS DC.

1. OPEN PADS REPRESENT CONTACTS ON OPPOSITE SIDE OF BOARD.

NOTES:



